



Communicable Disease and Epidemiology News

Published continuously since 1961
Laurie K. Stewart, MS, Editor

Vol. 41, No. 10

October 2001

- **Anthrax: Don't Panic!**
- **Anthrax Risk Assessment**
- **Management of Persons with Potential Anthrax Exposure**

Anthrax: Don't Panic!

As the *Epi-log* goes to print at the end of October, there have not been any cases of anthrax diagnosed in Washington State and none of the specimens from suspicious envelopes or packages that have been tested at the Washington State Health Department Laboratory have come up positive. Here are some general guidelines to keep in mind as you battle it out on the front lines:

✓ **Please don't send your patients to Public Health for anthrax testing**

The number one question we are being asked is "Where can I get an anthrax test?" Many people have been referred to Public Health by their health care provider for anthrax testing. Needless to say, these people tend to become confused (if not irate) when Public Health staff tells them that there is no screening test for anthrax exposure, and if they are ill they should see their health care provider. Nasal swabs and blood (serologic) tests that the CDC has been doing in response to *documented* anthrax exposures or infections are investigational tools. They have been used to help characterize mechanism and scope of anthrax exposure but are **not useful in managing individual patients**. Persons with an illness consistent with anthrax and a history suggesting potential anthrax exposure should be evaluated by their health care provider with blood culture, chest x-ray, CBC, and other indicated tests. For details on management of persons with suspected anthrax, please see the section titled **Patient Management**.

✓ **Anthrax vaccines are not commercially available or recommended.**

There is currently no indication for the use of anthrax vaccine in the general population. At this time, anthrax vaccine is in limited supply and only available for military personnel at risk for potential exposure to anthrax in combat settings. Anthrax vaccine is not available to the general public or the medical community. Anthrax vaccination currently requires 6 shots over an 18-month period with annual boosters.

✓ **Avoid prescribing unnecessary antibiotics**
Public Health recommends that physicians refrain from prescribing prophylactic antibiotics for the general public. Prophylactic antibiotics should be limited to persons with a known exposure to anthrax or a credible threat as determined after a law enforcement investigation in consultation with Public Health. Clinicians seeing patients who report they may have been exposed to anthrax should see the next section on **Anthrax Risk Assessment**.

Anthrax Risk Assessment

- **Persons involved in an anthrax threat involving a letter or package with "powder" should report the incident immediately to the local law enforcement agency (911)** for a threat assessment. The WA State Public Health Laboratory will only accept environmental samples for anthrax testing when law enforcement authorities, in consultation with Public Health, determine that a **credible threat** is present.
- **Prophylactic antibiotics should be limited to persons with 1) potential aerosol exposure to a credible threat (as determined by law enforcement authorities in consultation with Public Health), or 2) a confirmed anthrax exposure.**
- In certain highly credible potential aerosol exposures, Public Health may recommend preventive therapy until anthrax has been ruled out by testing at the WA State Public Health Lab and/or CDC.
- Clinicians evaluating patients who may have been exposed to anthrax should have the patient report the incident immediately to local law enforcement. If the clinician is concerned that a *high-risk* exposure (defined below) has occurred, please contact Public Health at 206-296-4774 (24 hours). **Please consult with Public Health before starting anthrax post-exposure prophylaxis whenever possible.**
- Detailed guidelines for handling suspicious packages, letters and substances can be found in the **CDC Health Alert** at:
<http://www.bt.cdc.gov/DocumentsApp/Anthrax/10312001/han50.asp>

Assessment of Individual Risk of Exposure

- **Factors that need to be assessed to define the nature of a possible exposure to anthrax include:**
 - 1) The credibility of the threat (as determined by law enforcement and/or Public Health);
 - 2) Whether a potential human exposure occurred; and
 - 3) The specific circumstances of the exposure (risk of inhalational or cutaneous disease)
- **Clinicians should take a thorough history** from patients with illness compatible with anthrax **including occupation**, travel in the past 60 days, **and circumstances of any exposure** to suspicious substances.
- Situations with higher credibility for the presence of anthrax: a distinct threatening message is sent with the powder or substance, or a suspicious letter or package is involved (see the CDC Health Alert for details).

- Situations with lower credibility for the presence of anthrax: powder is found without a note or is present in an expected mail envelope or package that is easy to trace to the sender.

Management of Persons with Potential Anthrax Exposures

- DO NOT isolate the patient. Anthrax is not spread person-to-person.
- Report to local law enforcement (911) if a potential threat exists and has not been already reported.
- Reassure the patient about the low risk of infection in the absence of a confirmed, culture-positive exposure.
- Refrain from use of nasal swabs for diagnosis of exposure. Nasal swabs and blood serum tests are used as epidemiological tools to characterize an outbreak when there is a confirmed clinical case or exposure. Nasal swabs are not useful diagnostic tools for anthrax exposure in asymptomatic people.
- Similarly, serologic studies that measure antibody titers to *Bacillus anthracis* are used as epidemiologic tools. Serologic tests are not indicated for screening or initial diagnostic purposes, and a single positive antibody titer is not diagnostic. To confirm an acute infection, seroconversion in acute and convalescent serum samples must be documented.
- **Provide advice to the patient** on the signs and symptoms of cutaneous and inhalational anthrax; reassure the patient that cutaneous anthrax can be readily diagnosed and treated.
- Arrange for follow-up if indicated and if symptoms suggestive of anthrax develop.

Low Risk Exposure: reassure and advise

- Definition: asymptomatic patient 1) WITHOUT known exposure to a confirmed culture-positive substance or credible threat associated with a letter, package or other scenario (as determined by law enforcement and Public Health); or 2) with exposure to a substance considered not to pose a credible threat by law enforcement authorities.
 - 1) Provide reassurance and advice to the patient as noted above. Refer patient with additional questions to Communicable Disease Epidemiology at (206) 296-4774.

High Risk Exposure: preventive treatment may be indicated

- Definition: asymptomatic patient with 1) potential aerosol exposure to a suspicious substance involving a credible threat (letter or other scenario) as determined by law enforcement authorities in consultation with Public Health; or 2) exposure to a substance confirmed to be positive for anthrax.
- Report to local law enforcement and Public Health if not already reported.
- Reassure patient about the low risk of infection even with exposure to a confirmed, culture-positive environmental sample.
- Hand washing and showering with soap and water are recommended, decontaminating the patient by means other than washing with soap and water is not indicated or recommended.
- **For confirmed anthrax exposures, also see** the October 26, 2001 MMWR (CDC. Update: Investigation of Bioterrorism-Related Anthrax and Interim Guidelines for Exposure Management and Antimicrobial Therapy, October 2001. MMWR 2001; 50:909-919. <http://www.cdc.gov/mmwr/preview/mmwrhtml/m5042a1.htm>)
- If the situation suggests a true potential for aerosol exposure and 1) the threat is deemed credible by law enforcement and Public Health authorities and 2) no substance is available for testing, Public Health will issue recommendations for preventive therapy.
- Provide support & understanding for patients, their families, and medical staff to prevent panic.
 - 1) Reinforce to patients the rarity of infection without known, confirmed culture-positive exposure.
 - 2) If exposed skin may have come in contact with an unknown substance/powder, recommend washing hands and showering with soap and water only.

Disease Reporting

AIDS.....(206) 296-4645
Communicable Disease...(206) 296-4774
STDs.....(206) 731-3954
Tuberculosis.....(206)731-4579
24-hr Report Line.....(206)296-4782
Hotlines and Websites:
CD Hotline.....(206) 296-4949
HIV/STD Hotline.....(206) 205-STDS
www.metrokc.gov/health/bioterrorism

Reported Cases of Selected Diseases, Seattle & King County 2001				
NR=Not Reportable in 2000				
	Cases Reported in September		Cases Reported through September	
	2001	2000	2001	2000
AIDS	10	22	207	202
Campylobacteriosis	25	21	239	247
Cryptosporidiosis	1	1	16	4
Chlamydial infections	368	362	3193	3423
Enterohemorrhagic <i>E. coli</i> (non-O157)	0	2	3	4
<i>E. coli</i> O157: H7	5	11	26	48
Giardiasis	15	25	107	176
Gonorrhea	135	107	1181	825
<i>Haemophilus influenzae</i> (cases <6 years of age)	0	0	0	0
Hepatitis A	4	7	18	83
Hepatitis B (acute)	2	2	27	31
Hepatitis B (chronic)	70	NR	452	NA
Hepatitis C (acute)	1	3	9	9
Hepatitis C (chronic, confirmed/probable)	108	NR	1064	NA
Hepatitis C (chronic, possible)	37	NR	429	NA
Herpes, genital	51	44	532	594
Measles	0	0	12	2
Meningococcal Disease	1	0	7	11
Mumps	0	1	1	9
Pertussis	7	12	31	158
Rubella	0	0	0	1
Rubella, congenital	0	0	0	0
Salmonellosis	23	24	206	173
Shigellosis	10	5	83	132
Syphilis	4	1	43	56
Syphilis, congenital	0	0	0	1
Syphilis, late	5	7	35	23
Tuberculosis	6	13	96	90

